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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/078,572	02/20/2002	Patrick T. McMullen		5055

7590

04/08/2003

Irving Keschner
Suite 1150
21515 Hawthorne Boulevard
Torrance, CA 90503

EXAMINER

PEREZ, GUILLERMO

ART UNIT

PAPER NUMBER

2834

DATE MAILED: 04/08/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/078,572

Applicant(s)

MCMULLEN ET AL.

Examiner

Guillermo Perez

Art Unit

2834

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) ____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 1-14 are rejected under 35 U.S.C. 102(b) as being anticipated by Schob (U. S. Pat. 6,130,494).

Referring to claim 1, Schob discloses a magnetic bearing (figure 7) for supporting a rotatable member (1) including a thrust disc (86) with respect to a stationary member (2) comprising:

first magnetic field generating means (87) for generating an axially polarized magnetic field linked magnetically through first and second air gaps between the rotatively member (1) and the stationary member (2), the first axially polarized magnetic field generating means (87) comprising first (80,82,84) and second accurate members (81,83,85) of high magnetic permeability and a single controllable electromagnetic coil (87) circumferentially positioned about the first (80,82,84) and second arcuate members (81,83,85) and radially spaced from the rotatable member (1); and

second magnetic field generating means (5) for generating a radially polarized magnetic field and being linked magnetically to the rotatable member (1) through an air gap between the thrust disc (86) and a radial pole assembly (3) to provide radial magnetic flux coupling of the rotatable member (1) to the stationary member (2).

Referring to claims 2 and 7, Schob discloses that the axially polarized magnetic field flows through first (84) and second axial poles (85).

Referring to claims 3, 8, and 12, Schob discloses that the first (80,82,84) and the second arcuate members (81,83,85) each comprise a plurality of magnetic segments.

Referring to claims 4, 9, and 13, Schob discloses that the first (80,82,84) and second members (80,82,84) comprise continuous magnetic members.

Referring to claim 5, 10, and 14, Schob discloses that the magnetic segments comprising the first and arcuate members (80,82,84) are affixed to the sides of the first axial pole (84) and magnetic segments comprising the second arcuate members (81,83,85) are affixed to the sides of the second axial pole (85).

Referring to claim 6, Schob discloses a magnetic bearing for supporting a rotatable member (1) including a thrust disc (86) with respect to a stationary member (2) comprising:

first magnetic field generating means (87) for generating an axially polarized magnetic field linked magnetically through first and second air gaps between the rotatively member (1) and the stationary member (2), the first axially polarized magnetic field generating means (87) comprising first (80,82,84) and second arcuate members (81,83,85) of high magnetic permeability; and

second magnetic field generating means (5) for generating a radially polarized magnetic field and being linked magnetically to the rotatable member (1) through an air gap between the thrust disc (86) and a radial pole assembly (3) to provide radial magnetic flux coupling of the rotatable member (1) to the stationary member (2).

Referring to claim 6, Schob discloses a magnetic bearing for supporting a rotatable member (1) including a thrust disc (86) with respect to a stationary member (2) comprising:

first magnetic field generating means (87) for generating an axially polarized magnetic field linked magnetically through first and second air gaps between the rotatively member (1) and the stationary member (2), the first axially polarized magnetic field generating means (87) comprising first (80,82,84) and second (81,83,85) arcuate members of high magnetic permeability, the axially polarized magnetic field flowing through the first (84) and second axial poles (85), and

a single controllable electromagnetic coil (87) circumferentially positioned about the first (80,82,84) and second arcuate members (81,83,85) and radially spaced from the rotatable member (1).

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Guillermo Perez whose telephone number is (703) 306-5443. The examiner can normally be reached on Monday through Thursday and alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nestor Ramirez can be reached on (703) 308 1371. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 305 3432 for regular communications and (703) 305 3432 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308 0956.

Guillermo Perez
Saturday, April 05, 2003


NESTOR RAMIREZ
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800